A. R. E. Ministry of Waqfs The Supreme Council for Islamic Affairs

ISLAM AND SCIENCE

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Head of the Committee of Experts.



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Under the Supervision of : Dr. Muhammad Ali Mahgoub

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by
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IN THE NAME OF ALLAH AL-RAHMAN (THE BENEFICENT) AL-RAHIM (THE MERCIFUL)

I FORWARD

Islam, in its true essence and spirit, is not merely theoretical, but also practical on a large scale. Its teachings match the physical laws of nature, and do not neglect the normal needs of human bodies and their lot of life. In this respect the Holy Qurán says, for example what means:

And neglect not your portion of the earthy life and be kind as Allah has been kind to you. — Al-Qassus — (77).

القصص (٧٧)

In order to lead man to the righteous path and to moral values, the Prophet's Traditions and the Holy Qurân guided him together fully and in detail. They both call for fear of for obeying) Allah, superior manners and sincerity. A real Muslim is he whose goodness and efforts are directed mostly to the benefit of the community indiscriminately;

... Those who will believe are those who fear Allah.

— Al-Aala — (10).

And keep the convenant. Lo, of the convenant it will be asked. — (Al-Israe) — (34).

No doubt, the values of fear of Allah, sincerity and mercy are the outstanding values that lead the Muslim directly towards (A state of faith and science), comprizing ardency, diligence and faithfulness adhering to the bright illuminative values:

And this is My path; it is straight so follow it; and follow not other ways lest you would be parted from His way; this is Allah's advice that you may fear Him. — Al-Assam — (153).

When we call Allah by His names the Beneficent and the Merciful, we generally mean abstract goodness and tenderness;

Say ask Allah or ask the Beneficent, Whichsoever you ask; His are the utmost magnificent names. — Al Israa — (110).

Muslims usually start their work with the name of Allah, followed by the Beneficent and the Merciful, However, it is said that Beneficent is general, while Merciful is particular. In other words, Beneficent means the generous with providence and mercy to the believers and the unbelievers, while Merciful is particular to the believers only. This also means that Beneficent refers to the world, and Merciful to the Day of Mercy (the Hereafter).

1. ... And My mercy embraces everything ...

- Al-Aaraf - (156).

2. Say Allah has prescribed for Himself mercy ...

This is why a true Muslim is assumed to help those who deserve being helped irrespective of nationality, race or even religion, by various ways, such as "medical treatment, education, financial support ..."

And We have not send you but mercy to mankind.
 Al-Anbivaa — (107).

This verse concerns the Prophet Muhammad. Referring to the followers of Jesus, the Holy Quran says what means:

 ... And placed compassion and mercy in the hearts of those who followed him ... — Al-Hadeed — (27).

Refering to the scripture revealed to Moses, the Holy Quran says what means:

... And before it was the Book of Moses an example and a mercy ...

In the sense of opening the gates of good odour, the Holy Quran says what means:

4. That which Allah opens to mankind of mercy none can withhold it ... - Fatir (2).

The principal aim of the present series is not merely to interpret, or comment on, some verses of the Holly Quries which are bearing to science, but also to present to the reader the mental peace required, or at least to offer him the chance, in order to think over his situation and thus place him directly with his essential problems, namely the religeous problems.

In fact, the question is not simply either to believe or not to believe ... One has first to be convinced (mentally). Our belief should neither be merely paradoxical nor dogmatic. Argumentation regarding this problem is natural and necessary in order to reach a balanced state and mental satisfaction, and avoid mess and tendency of indifference which do not afford peace. Fear from the future and not being free from agony are the ultimate result.

For such reasons the Holy Quran rejects blind belief.

ARGUMENTATION IN THE HOLY QURAN

I. FOREWORD

Islam rejects blind belief and gives unique examples to think freely, and to discuss the outstanding topics on which man's belief should be built.

The arguments of the Holy Qurân are formulated in a sublime style which strikes the minds with its logic and simplicity. Some are novelized to strike the hearts too. The following are examples:

1) Concerning the existence of the Creator (Allah):

Were they created of nothing? Or were they (themselves) the creators? Or did they create the heavens and the earth? Nay, they have no firm belief. Or are the treasures of your Master with them? Or are they the managers (of affairs)?

— Al-Toor (35 - 37) —
Al-Toor (35 - 37)

2) The herafter is by all means believed to be a (religious) fact. In this respect the Holy Qurân says, for example what means:

And he (the nonbeliever) gave us an example and forgot himself being created; he said: Who resurrects (raises up) the decayed bones once more? Say He. Who formerly created them for the first time raises them up (resurrects them) back again to life and He is well aware of every creation. — Yasin (78 - 79) —

Regarding the oneness of the Almighty Allah; He says what means:

If there were in them (the heavens and the earth) other gods besides Allah there would have been confusion in both — Al-Anbiyaa (22) —

4) No son did Allah beget, nor is there any god along with Him, behold, otherwise each god would have taken away what he had created and some would have mastered it over others — Al-Moominon (91) —

5) The following verse is an ideal example of argumentation concerning standing to reason in the Holy Qurân:

Have you (Muhammad) not seen the one who argued with Abraham about his Master, that Allah gave him the sovereignty. Abraham thus said: My Master is He Who offers life and inflicts death. He said: And I offer life and inflict death. Abraham said: Certainly my Master brings the sun from the east, and you have to bring it from the west. He, who did not believe, became pale, and Allah does not lead the unjust people to the righteous way. — Al-Baqara (258)

II. THE NOVELETTE OF ABRAHAM

Historically, the people of the prophet Abraham (Babilonians) worshipped idols which were taken to stand for various heavenly bodies, on the top of which Marduck represented the planet Jupiter.

Abraham's father, Azar, was chief of his people. His name was found among the names of the kings of Babylone (from 1126 to 1105 B.C.). It is possible, however, that Abraham lived in Oar, long before this date as may be deduced from the Holy Qurân, which, as far as an astronomer may readily conclude, describes excellently an occasion of total solar eclipse. The event was followed carefully by Abraham who thus realized the actual status of Jupiter, the moon and the sun, together with the status of their major idols. He became very sure that none of them was god.

Eclipses have traditionally struck terror into mankind. But when the arrangement of the solar system was understood they could be seen as consequences of geometry. The earth and the moon throw long conical shadows in sunlight. The earth's shadow causes eclipses of the moon and the moon's shadow gives rise to solar eclipses.

A solar eclipse may be total in the part where the cone of shadow of the moon just touches the earth's surface at some place, and may be annular elsewhere. Annual eclipses are more frequent than total eclipses.

Within the moon's shadow daylight is rapidly cut short as the sun's disc disappears behind the body of the moon, and the light fades into twilight. The moon's shadow sweeps very fast across the earth's surface, and a total eclipse thus lasts a very short time. It is not amazing, therefore, that the Holy Qurân introduces the word (janna) to express such rapid and abnormal changes in daylight.

The actual speed of the shadow across the earth's surface varies with the latitude of the place. At the equator the longest possible total solar eclipse lasts 7 min. and 40 sec; while at latitude 45 degrees it is 6.5 minutes. At Oar it is within the range 6 to 7 minutes.

When light fades into twilight only one planet appears in the sky. This planet is (as usual) Venus, but it soon disappears. This stage is followed by the appearance of the edge of moon's disc against the sun. The eclipse is over as soon as the last dent in the sun's disc vanishes.

The Holy Quran narrates in the story of Abrahm what means: Lo! Abraham said to his father Azar: Do you take idols for gods? For sure I see you and your people in manifested astray. So also did We show Abraham the nature and wonders of the heavens and the earth that he might have certitude (with understanding). When the night rapidly covered him he saw a planet. He said: This is my-Master, but when it disappeared he said I love not those who disappear. And when he saw the moon appearing in splendour, he said: This is my Master. But when it disappeared, he said: Unless my Master guides me I shall surely become among the people who go astray. And when he saw the sun appearing in splendour, he said: This is my Master. This is larger. But when the sun set, he said: O my people, I am (now) free from your (sint of believing in partners to Allah. I have directed my face towards Allah Who created the heavens and the earth and I do not belong to those who partake partners to Allah.

- Al-Anaam (74 - 79) -.

وُّ إِذْ قَالَ إِرَّهِمُ لِأَسِيهِ ءَازَرَ أَغَفِّهُ أَمْسَنَامًا ءَالِهَ أَ إِنِّ أَرَنْكَ وَقَوْمَكَ فِي صَلَكِلٍ مَّبِينِ وَكَذَلِكَ نُرِعَ إِرَّهِمِ مَلَكُوتَ السَّمَوَتِ وَالْأَرْضِ وَلِيَكُونَ مِنَ الْمُوقِنِينَ قَلْمًا جَنَّ عَلْهِ النِّسُلُ رَءًا كُوْكُمُ ۖ قَالَ هَنَذَا رَبِّي فَلَنَّا أَفَلَ قَالَ لَآ أَحِبُ الْآفِلِينَ ﴿ فَلَنَّا رَءَ الْفَمَرَ بَاذِغَاقَالَ مَنْنَا رَوَالْفَمَرَ بَاذِغَاقَالَ مَنْنَا رَوَّ فَلَنَّا أَمْنَ الْفَوْمِ الطَّالَينَ فَلَنَّا رَوَالنَّفُسِ بَانِفَعُ الضَّالِينَ فَلَنَّا أَكُنِّ مَنْنَا أَكُنِّ فَلَنَّا الْفَنْ قَالَ بَنْفُومِ إِلَيْنَ مَعْمَلُ النَّمْوَتِ مَنْفَا أَكُنَّ مِنْكُ وَجَهِي لِلَّذِي فَطَرَ السَّمَوْتِ وَالْأَوْضَ حَنِهُ أَمِنَا أَنْهُ مَنْ الشَّمْرِينَ ...

وَالْأَوْضَ حَنِهُ أَمِنَا أَنْهُ مَنْ الشَّمْرِينَ ...
وَالْأَوْضَ حَنِهُ أَمِنَا أَنْهُ مِنْ الشَّمْرِينَ ...

الأتعام (۲۶ – ۲۹)

III. ABRAHAM SMASHES THE IDOLS

Abraham, ultimately, decided to smash into pieces the idols which were all kept in the temple; but he did not touch the largest idol, in order that he might later accuse him (sarcastically) in the presence of his people when they return back and observe their smashed idols!

The moment Abraham became alone in the temple he did accomplish his decision. Eventually, his people, on discovering the case, declared that they had heard a young man called Abraham arguing about them. On questioning Abraham about the matter, he told them (sarcastically) that it was the chief idol (Marduck) which should be accused, and added that they could request confirmation of his accusition from the idols if they could speak!

Concerning this event, the Holy Quran says what means:

Remember when he (Abraham) said to his father and his people: What are these images which you are so entimately devoted? They said: We found our fathers worshipping them. He said: In deed both you and your fathers have been in manifest astray. They said: Do you sincerely tell us the truth or are you jestering with us? He answered: Verily, your Master is the Master of the heavens and the earth. It is He Who has created them and I am one of those who have witness thereof And by Allah I will surely devise a blot against your idols after you have retired from them and turned your backs. Consequently, he broke them all in pieces, except the largest of them he did not touch it, that they might lay the blame upon it. They asked (inquiring): Who has done this to our gods? Indeed he is one of those who are (to be held) guitly. They said: We have heard a young man who mentioned them. He is called Abraham. They added: Bring him before the eyes of the people that they may here be witnesses. They asked: Have you done this to our idols. O Abraham? He answered: Nav. that biggest of them have done it. So ask them if they can

speak. They returned to themselves and said to one another: Verily you are yourselves the guilty. Then they returned into their former obstinacy and said: Surely, you have known that these speak not. He said: Do you thus worship beside Allah that which neither profits you at all nor can it hurt you!? Fie upon you and upon that which you worship beside Allah; are you not wise? — Al-Anbiyaa (52 - 67).

ۚ إِنَّا قَالَ لأَبِيهِ وَقَوْمِهِۦ مَاهَدِهِ التَّمَاثِيلُ الَّتِيَّ أَنتُمْ لَمَا عَكِفُونَ ﴿ قَالُواْ وَجَدْنَا ءَابَاءَنَا لَهَا عَلِيدِينَ ﴿ قَالَ لَقَدْ كُنتُمْ أَنتُمْ وَءَابَآ وُكُرْ فِي ضَلَيْل مُّبِين ﴿ قَالُواۤ أَجِنْتُنَا بِالْحَقُّ أَمُّ أَنتَ مِنَ ٱللَّعِبِينَ ﴿ قَالَ بَل رَّبُّكُمْ رَبُّ السَّمَوَات وَالْأَرْضِ الَّذِي فَطَرَهُنَّ وَأَنَّا عَلَى ذَالِكُم مِّنَ الشَّنهدينَ ٥ وَتَالَقُ لَأَكِدَنَّ أَصْنَامَكُم بَعْدَ أَن تُولُواْ مُدْيرِينَ ﴿ فَجَعَلَهُمْ جُذَاذًا إِلَّا كَبِيرًا لِّمُمْ لَعَلَهُمْ إِلَيْهِ يَرْجِعُونَ ﴿ قَالُواْ مَن فَعَلَ هَاذَا بِعَالَهَتِنَا إِنَّهُ لَمِنَ ٱلظَّلِمِينَ ﴿ قَالُواْسَمْعَنَا فَتَى يَذْكُوهُمْ يُقَالُ لَهُ ۖ إِبْرُهِمُ ٣ قَالُواْ فَأَتُواْ بِهِ عَلَى أَعْيُنِ النَّاسِ لَعَلَّهُمْ يَشْهَدُونَ ﴿ قَالُواْ وَأَنْتَ فَعَلْتَ مَاذَا بِعَالِهَتِنَا يَالْ رَاحِمُ ١٤ قَالَ بَلْ فَعَلَّهُ كَبِيرُهُمْ هَاذَا فَسْعَلُوهُمْ إِن كَانُواْ يَنِطِقُونَ ﴿ فَرَجَعُواْ إِلَىٰ أَنْفُسِهِمْ فَقَالُواْ إِنَّكُمْ أَنْتُمُ ٱلظَّالِمُونَ ﴿ ثُمُّ نُكِسُواْ عَلَىٰ رُءُوسِهِمْ لَقَدْ عَلَمْتَ مَاهَـٰتُولَاءَ يَنطقُونَ ﴿ قَالَ أَفَتَمْبُدُونَ مِن دُونِ اللَّهِ مَالاً يَنفَعُكُ مُ شَيْعًا وَلا يَضُرُّكُمْ ١٠ أَفَّ لَّكُمْ وَلِمَا تَعْبُدُونَ مِن دُونِ آللُّهُ أَفَلَا تَعْقَلُونَ ."

IV. THE HOLY QURAN ARGUES IN PLAIN TERMS THAT THE HEREAFTER IS DOUBTLESS

Generally, proofs of this type bring us to (terms), taking into account that man has become already wise enough to think them over. They do not compel argumentation. Consider, for example, the question: When can dead people be raised to life? According to the theory of (Al-Dahriya) in brief, there is neither hereafter nor further life. The Holy Quran says about this old theory what means:

And they said: There is nothing beyond our world's life. We shall die and we live but nothing perishes us except the time marshing on. Nay, about that they have no knowledge. They only guess. When our manifest verses are recited to them they have no claim except saying. Bring back our fathers if you are telling the truth. Say Allah offers you life then He calls you to die then He raises you up for the Last Day. No doubt in this but most people know no.

- Al-Jathiya (24 - 26)

وَّقُلُوا مَا هِي إِلَّا حَبَائُنَا الذِّنِيَا ثَمُوتُ وَغَيَّا وَمَا يُمْلِكُنَا إِلَّا الْمَثَّرِ وَمَا لَمُم يِدَ اللّٰهِ مِنْ عِلْمُ إِنْ هُمْ إِلَّا يَطُنُونَ ﴿ وَإِنَّا أَنْفَلَ طَنَوْمَ مَا لِثَنَا بَيْنَتُوتِ مَّا كَانَ خَمْتُهُمْ إِلَّالًا وَالْوَا النُّوا إِنَّا اللّٰهِ اللّٰهِ مِنْ الْفِيسَةِ لَارْبَا فِيهِ وَلَكِنَّ أَكْثَرَ الْجَيْمِيْةُ مُمْ يُجِينُكُمْ مُمْ يَجْمُعُكُمْ إِلَى يَوْمِ الْفِيسَةِ لَارْبَا فِيهِ وَلَكِنَّ أَكْثَرَ الجانية (٢٤ - ٢١) Naturally, one should expect that the resurrection in the hereafter should be much easier than the creation. In the Holy Quran one reads what means:

O mankind if you are in doubt about the resurrection, (consider) that We have created you out of dust, then out of sperm, then out of a leech-like clot, then out of a morsel of flesh, partly formed and parlty unformed, in order that We may manifest Our power to you; and We cause whom We will to rest in the wombs for an appointed term, then do We bring you out as babies, then foster you that you may reach your age of full strength, and some of you are called to die, and some are sent back to the feeblest old age, so that they know nothing after having known (something); and further, you see the ground barren and lifeless, but when We let rains fall on it, it stirs and swells, and puts forth every type of beautiful pairs of growth. This is so because Allah is the Reality and it is He Who gives life to the dead, and it is He Who has power over all things. And verily the hour (or the last day) will come, there can be no doubt about it, and about the fact that Allah will raise up all who are dead. - Al-Haj (5 - 7)

يُكَأَيُّهَا النَّاسُ إِن كُنتُمْ فِي رَبْ مِنَ الْبَعْثِ فَإِنَّا خَلَقَنَتُكُمْ مِن ثُرَابٍ ثُمَّ مِن الْفَلْقَدِمُ مِن عَلَقَةَ ثُمِ مِن مُطْفَقَةً عَلَقَةً وَتَقَرِيعُ كَلَّقَةٍ لِنَّبَيْنَ لَكُمْ وَنَقِرُ فِي الْاَرْعَامِ مَا نَشَاءً إِلَّى أَجْلِ مُسَمَّى ثُمُّ تُحْرِجُكُمْ طِفْلًا ثُمَّ لِتَبْلَغُوٓ ا الْفَدُّكُمُّ وَمِنْكُمْ مَن يُحَوَّفَ وَمِنكُمْ مَن يُرَدُّ إِلَى الْفَرِلِكَلَا يَمْلَمُ مِنْ بَعْدِ عِلْمِ شَيْئًا وَرَى الْأَرْضَ هَامِدَةً فَإِذَا الْوَلْنَا عَلَيْهَا الْمَاءَ الْمُتَوَّنَ وَرَبِّ وَانْبَيْتَ مِن كُلِّ ذَوْعٍ بَهِ عِنْ اللَّهِ فَالْاَلْمَ اللَّهُ مُواللَّهُ اللَّهَاءَ

⁽¹⁾ The Reality is one of the 99 names of Allah.

Naturally the belief in creation (as described by the above verses) involves directly the belief in resurrection. The method of argumentation in the verses proves without the least doubt that He Who created man from dust can readily resurrect him, or let him rise to life again, after death: Allah savs what means:

a — And of the people are some who argue about Allah without (any) knowledge, and with neither faithful guidance nor an enlightening book. — Al-Haj (8) —.

Evidently, the Holy Qurân presupposes every sort of argument.for both the simple and the highly educated man. One has to conceive how simple and clearly convining was, is and shall ever be, the Islamic Call.

b — And they (the infidels) uttered: Had we been not heedless of listening (to the righteous words), or had been wise, we could escape being with those who are driven to the torment of fire. — Al-Mulk (10) —.

الملك (١٠)

One also reads in the Holy Qurân a set of verses in which Allah's argumentation refers him directly to stand to logic and to use his mind. The following are some verses of this type:

c — Lo! is it that He Who creates is like that which does not create? Do you (the infidels) mind not? — Al-Nahl (17) —.

d — And does man consider not that We created him formerly and that he was nothing? — Maryum (67)

e — Surely the creation of the heavens and the earth is greater than the creation of the human beings, but most of the people know not. — Khafir (57) —

غافر (۷۰)

f- Is it not that He Who created the heavens and the earth is by all means able to create like them? Nay! And He is all creating and all knowing. — Yasin (81) —.

3. ISLAMIC VALUES AND THEIR IMPACT ON SCIENCE

I. TRUTH

Truth on the part of all people is commendable and on the part of scientists is more, so science progress depends entirely on reporting the truth regarding any scientific report or discovery. However, telling the truth is a character inspired by gallantry, and a requisite demanded for the success of any scientific research. The Prophet Muhammad (prayers and peace be upon him) says:

Tell the truth even if it hurts you with the fire of threat ...

Generally speaking, telling the truth and lying both have their roots in: Uttering, promisis research work which express a bit of news, either to exclude or to support other statements, or even to add new statements. The Holy Qurân says what means:

a. And who is more true than Allah in statement?

— Al-Nisea (87) —

النساء (۸۷)

b. Surely he (Ismaeel) was a keeper of his promise ...

- Maryum (54) -

مريم (٥٤)

Telling the truth is a fundamental virtue essential for the human society and progress. Has it not been for them, then, no righteous paths would have been illuminated, nor scientific progress has been realized, nor art developed.

Hypocrites are also liars and do not tell the truth for some reason or another, concerning them, the Holy Qurân says what means:

When the hypocrites come to you (Muhammad), they say we do witness that you are Allah's Messenger, and Allah witnesses that you are His messenger, but Allah witnesses that the hypocrites surely sneak false.

- Al-Munafiqoon (1) -

The Messenger's public call to Islam in Macca was based to a certain extent) on the truth of which he was well-known among his kindred. He said: What would you say if I told you that beyond this valley there were horsemen wishing to assault you? Would you believe me? They said: Yes. We have never known you to be a liar. He said: I am a warner to you in face of a terrific doom.

Allah Almighty commanded His Messenger to ask Him to make his way in and way out based on truth:

And say my Master, cause me to come in with a truth incoming and to go out with a truth outgoing and ofer me from Your presence a sustaining power. — Al-Israe (80) —

It may be seen that in the Holy Qurân Allah classifies people into truthful and hypocrites:

In order that Allah rewards the truthful men for their truth and punish the hypocrites if He wills, or relent towards them......

- Al-Ahzab (24)

Allah says that on the Day of Resurrection nothing benefits or saves man from the dread of that Day except truth. Allah says what means:

Allah said this is a Day on which the truthful profit their truthfulness; for them are gardens underneath which rivers flow, wherein they are secure forever; Allah takes pleasure in them and they in Him. That is the utmost triumph.

— Al-Maida (119) —.

A man of letters once said: There is no sword like right and no help like truthfulness.

The value of truth regarding science and scientific research is highly essential. Delicate instruments and sensitive tools have been devised in order to collect true and correct readings from the univrse necessary for the various fields of science. Some people, for some reason or another, cook the readings, or fabricate the observations! They are liars in this sense, or even they are hypocrites. The Holy Qurán says about those who lie with respect to Allah what means:

And on the Day of Resurrection you (Muhammad) see those who lied on (concerning) Allah with their faces blackended; is not in hell the home of the scorners?

(Al Zumar (60)

II. PERFECTION

IN WORK AND DUTIES

Islam urges Muslims to do their best to accomplish their properly, and to ensure high quality of production. This value compromises both success and security. It cannot be realized unless every Muslim who is entrusted with any work or thing to do is bound by it. In this sense the Holy Qurân says what means:

Fulfil the convenant of Allah when you have convenanted, and break not your oaths after the asseveration of them, and after you have made Allah surety over you. Lo! Allah knows what you do. — Al-Nahl [91] —

The Prophet Muhammad (prayers and peace be upon him) says: Allah likes from every one of you when doing some work to do it properly.

The true Muslim is he whose acts abound, and whose deeds and activities benefit others indiscriminately. Disregarding such values and behaving in a different manner is not true Islam:

(O Muhammed) set your perpose tor religion as a man by nature right, the nature (framed) of Allah in which He has created man. There is no altering for the creation (framed) of Allah; that is the precious religion, but most people know not. — Al-Room (30)

الزوم (۳۰)

Islam, in order to lead man to such values has guided him thereto explicitly in full and in detail. When one reads Allahi's explicit verses and seeks their implications he shall find in them such constructive values that they may sublimate man and place him in the pinnacle of the destined good and success

The true Muslim (disregarding the present status of some wicked Muslims following various misleading man made teachings which contradict the true Islam) is he who affords himself and his society a stock of superior manners and fruitfull work:

Whoso does right it is for his soul and whoso does wrong it is against it, and your Master is never a tyrant to His servants (people).

- Fussilat (46) -

فصلت (٤٦)

Doing things well means achieving them precisely and accurately, bearing Allah in mind and fearing Him in private, and in public.

It is said that: If man's actions in private are compatible with his actions in public, this is just; and when his actions in private are better than his actions in public, this is a favour; but if his actions in public are better than his actions in private, this is injustice!

Righteousness in work affords numerous offshoots which, however diverse, go all back to the giving away of one's mind, one's effort and one's time in the hope of gaining Allah's and people's consent.

People's treaties, among themselves are represented by contracts of various affaires, financial commitments or otherwise that are drawn among them, as well as the treaties between nations defining rights or obligations which must all be kept unless they commit a sin by deprivation of a right or causing serious harm or damage to individuals or a nation. The Holy Qurán has been very keen on urging the keeping of treaties:

1. That He may ask the truthful of their truthfulness

- Al-Ahzab (8) -

2. Among the believers are men who are true to that which they covenanted with Allah — Al-Ahzab (23)

3. Lo! We suffer not the reward of one whose work is goodly to be lost. — Al-Kahf (30) —.

III. ISLAM RAISES SCIENCE TO THE UTMOST VALUE

Disregarding the generally observed feature that most of the Muslims have become, during the last few centuries, well behind the caravan of science progress for several factors, one cannot deny the principal role played by the Muslim scientists in establishing the principles of basic science as urged by the Holy Qurán — Refer to Book 3 —. This was achieved during the so-called (Dark Ages) or (Middle Ages) by means of true Muslims. — Refer to Books 1 and 6

One of the oustanding factors that lead to the degeneration of the Muslim world was the insertion into the meanings of various verses of the Holy Qurân and the Traditions — see Book 4 — misleading interpretations, fairy tales and gossips now know as (israiliat).

In fact, the very first verse of the Holy Qurån gave incentive to gain knowledge and to glorify it. It was the signal for the dawn of the Age of Science and a forerunner of giving knowledge its due dignity. The Holy Qurån thus says what means:

 Read in the name of your Master Who created. Created man from a clot. Read and your Master is most generous.
 Who taught by the pen. Taught man what he knew not.

- Al-Alaq - (1 - 5).

At the different stages of the revelation, the Holy Qurfan explained the meaning of science or knowledge, and pointed out to the importance of studying the universe, including its matter, radiation and living beings. For example, the Holy Ourân savs what means:

2) ... Those of His servants only who are possessed of knowledge fear Allah; surely Allah is Mighty Forgiving.

- Fatir - (28) -.

فاطر (۲۸)

Indeed in the heavens and the earth there are signs for the believers.

Al-Jathiya — (3).

3) ... Say are those who know and those who know not alike?

- Al-Zumar - (9).

A great number of verses not only speak highly of science and scientists, but also urge us to pursue science and to discover the secrets embedded in the buildup of the universe. Physical laws are nothing but exact interpretations of different phonemena in the world. Scientists do not claim absolute aucenticity of such laws, but they agree that the physical laws represent the largest possible amount of authenticity and precision. In the light of growing accuracy and progress in the field of observation, generalisations (and additions) in some of the laws are made so as to bring them closer to what may be referred to as (fact):

1) They know (only) what is apparent of the earthly life

— Al-Room —

الزوم (۷)

2) See they not what is before them and what is behind them of the heavens and the earth? ...

— Sabaa (9) —

3) And of His signs is the creation of the heavens and the earth and the diversity of your tongues and colours. Surely there are signs in this for the learned.

- Al-Room (22) -

The Middle Ages witnessed (in Europe) a long period of strife between the advocates of religion and the advocates of science. Islam has never witnessed such a struggle. It has always encouraged the search of the universe in the hope of uncovering secrets, signs of the Creator and physical laws governing the universe.

However, as time marched on, science progressed rapidly in Europe within the last two or three centuries, but Muslims assumed that the interpretations of their old masters, notably in the field of science were final and applicable to all times. Evidently, this was but a twist of mind which expressed ignorance of the dynamics of social life, and retardation behind the caravan of scientific discoveries and making use of the sources of energy and power in nature. But Allah says what means?

And say: O my Master (Allah), I beg for increasing my knowledge.

- Taha (114) -

The beginning of this decline was a result of the socalled: Closing of Bab al-ijtihad (= research). But, however, most of the Muslims now work hard to change the course in the direction of true Islam for the good of the world at large.

IV. THE VALUE OF THE DISTRIBUTION OF WEALTH

Islam declares the ideal that all the wealth of the people belongs to Allah:

a) And to Allah belong whatever is in the heavens and whatever is in the earth ...

- Al-Naim (31) -

Allah orders that wealth should not be monopolized by some persons only:

... And give them of the wealth of Allah which He has given you ...

النور (٣٣)

In general, Islam decrees that the acquisition of wealth should not be regarded as ownership, but as mere "trust" or a "medium". The Muslims are requested to keep the "trust", and the true Muslims are those described in the Holy Qurân which says what means:

And those who are keepers of their trusts and their covenant.

Actually, Islam's principles of distribution are clear, and according to them everybody has first to obtain his needs:

a) And give to the near of kin his due and to the needy ...

— Al Israe (26)—

الإسراء (٢٦)

2) And those in whose wealth there are known rights; for the begger and the deprived.

— Al-Maarij (24 - 25) —

المعارج (۲۶ - ۲۰)

3) Have you seen him who belies religion? For sure that is the one who is rough to the orphan; and urges not the feeding of the needy.

— Al Ma-oon (1 · 3) —.

When every member of the community is able to meet his essential requirements of food, clothing, dwelling or shelter, thus living at the level, or limit, of sufficiency, then the distribution of wealth is to be made according to factors such as: each individual's effort and perfection of work ... the Holy Ouran says what means:

4) For men is the benefit of what they earn and for women is the benefit of what they earn ...

- Al-Nisa-a (32) -

النساء (٣٢)

Evidently, Islam does allow opplence, provided that everyone in the community has reached a level of suffciency, notably through being given suitable work. Islam also does not permit disparity to exist between the wealthy and the poor. Wealth could accumulate only after poverty is eradicated:

5) And they ask you (Muhammad) as to what they should spend. Say: What you can spare ...

— Al-Bagara (219) —

البقرة (٢١٩)

Such an attitude does it not put an end to crime and strife among the people!?

6) Whatever Allah restored to His Messenger from the people of the towns, it is for Allah and the Messenger and for the near of kin and the orphans and the needy and the wayfarer, so that it be not taken by turns by the rich among you.
Al-Hashr (I) = AHsahr (I) =

العشر (٧)

7) ... And the unjust pursued the enjoyment of plenty and they were guilty.

— Hood (116) —

8) And when We wish to destroy a town, We let it be commanded by its people who lead easy life, thus they transgress therein, and the word proves true against it, so We destroy it with utter destruction.

— Al-Israa (16) —

In conclusion, Islam requests the eradication of poverty, not only through charity, or by reformatory measures. In order to eliminate poverty Islam has not only urged perfection of work and increase in production, both of them being regarded a form of worship, but also asked for sufficiency of everybody and for the sake of the elimination of disparity in incomes.

4 ONCE MORE: WHY ISLAM?

I. THE AGE OF SCIENCE PUTS A SEVERE TEST TO ALL RELIGIONS

This is a conflict in which most religions still survived, albiet, bruised and bleeding; but this does not apply to Islam, which alone faced this challenge and overcame its destructive effects.

Béforehand, as we have shown briefly in this series of books (Islam and science), no contradiction arises between Islam and science. Needless to say that the teachings of Islam are in favour of science and scientific progress.

As a rule, however, religion must cope if it is to have real place in the modern world, and to survive against atheism. Three main issues arise in this respect. These are:

I. THE FREUDIAN PROBE

In some relgions, other than Islam, if the true believers ind themselves in a conflict as to satisfy their natural desires or to escape to spritual comfort in abstaining from them, legitimate and correct as they may be, true Muslims do not suffer from this schizophrenia. To them there exist no curse what ever that may attach the body, nor is it regarded as filthy and profane. In Islam there is no comflict whatever between leading a life of physical pleasure and being conscientious at the same time. The Holy Qurân says for example what means:

 O children of Adam, wear your beautiful apparel at every time and place of prayer; and eat and drink but waste not by excess, for He (Allah) likes not the wasters. Say: Who has frbidden the beautiful gifts of Allah which He has produced for His servants...

- Al-Aaraf (31 · 32) -

2 And when the prayer is over, then you may disperse through the land and seek of the bounty of Allah and remember Allah often and without stint that you may prosper.

— Al-Jumuaa (10) —

Evidently, such honourable treatment of the material body from a basic Islamic notion, namely its conception of a whole universe without conflict between matter, body, soul and mind, is unique. There is no dualism of the world. The existence as a whole is mastered by Allah alone, and there is no wrold under the lordship of the devil. Muslims are so saved the pyschological conflict between natural bodily desires and conscientious righteousness.

II. THE ERA OF SPACE PROBE

This issue comprises the great possibility of man's new power to communicate with other wise creatures living on other planets outside the solar system. The theory of probability points out at the existence in our galaxy of not less than two million inhabitable planets like our own earth! Muslim's (according to their faith) do not see at all that this is impossible, because Islam does not rule out this great possibility. For example, the Holy Qurfan says what means:

And among His signs is the creation of the heavens and the earth and the living creatures that He has dispersed through them; and He is most able to gather them together if He wishes.

- Al-Shura (29) -

الشورى (۲۹)

Again, if the modern man, equipped by modern science and technology, feels that he has acquired some new mastery and power over the universe, true Muslims do not experience that feeling. This has already been pointed to him by the Holy Qurán which says what means:

1. Have you not seen that Allah has subjected to you all things in the heavens and the earth and has made His bounties flow to you in exceeding measure seen and unseen ...

- Luqman (20) -

 $2\,\,\ldots\, And$ if you count the bounties of Allah you are bound to find the unlimited \ldots

— Ibrahim (34) —

III. WORLD INTERDEPENDENCE

This is the third issue and, as mentioned in book (3) of this series, it is not strange to Islam, being one of its principal commandments. The following are examples of verses from the Holy Qurán, which mean:

1 O mankind! We created you from a single pair of a male and a female, and made you into nations and tribes so that you may know each other. Verily the most honoured of you in the sight of Allah is he who is the most righteous ...

Al-Hujurat (13) -"أَنَّهُمْ النَّاسُ إِنَّا خَلَقْنَكُمُ مِّن ذَكَرٍ وَأَنثَى وَجَعَلَنَكُمُ شُعُوبًا وَقَبَاإِلَ إِنِّيَانَهِمَّا النَّاسُ إِنَّا خَلَقْنَكُمُ مِّن ذَكَرٍ وَأَنثَى وَجَعَلَنَكُمُ شُعُوبًا وَقَبَاإِلَ التَهَاوُفِيَّا أَنِّ أَكْرَكُمُ عندَ لَللهُ أَقْلَكُمُ ""

For sure Allah is not the Master of a certain group, tribe, race, or sect of poeple, but the Master of the world's inhabitants

الحجرات (۱۳)

2. The first three verses, and the most often repeated verses that Muslims recite in various occasions form the opening of al-Fatiha — see book (4):

In the name of Allah Al-Rahman (the Beneficent) Al-Rahm (the Merciful). Praise be to Allah Master of all mankind. Al-Rahman Al-Rahm.

- Al Fatiha (1 - 3) -



The Prophet Muhamad, prayers and peace upon him, said:

1. There is no special virtue of an Arab over a non-Arab except by righteousness and piety.

2. All mankind are as equal as the teeth of a comb.

So Islam forbids segregation according to colour, sect, creed or nationality. Regarding true Muslims they must be together:

Like the body, if an organ thereof feels sick, the rest of the organs will call up to its aid by awakeness and fever.

Here, the question arises: Do Muslims now really behave in this manner?!!

5. ISLAM ALONE COMPRISES THE WHOLE TRUTH

I. ISLAM PROVIDES ITS ADHERENTS

As outlined in books (1), (2), (3) and (4), Islam's adherents are achieved with a complete comprehensive way of life in which the relation of the individual to society and the material to the spiritual are balanced into perfect harmony.

When one studies carefully the beliefs of the major faiths, he comes to the conclusion that originally all the outstanding religions were one, but as time passed they deviated and became corrupted. In fact, this rule applies to all religions concerned in the Holy Qurân which says what means:

... And not a single nation but had in the past its apostle.

" …. وَإِن مِنْ أَمَّةٍ إِلَّا خَلَا فِيهَا نَذِيرٌ..

- Fatir (24) -

فاطر (۲٤)

Idol worship, the idea of reincarnation and the caste system began to permeate Hunuism. Passivity became characteristic of Buddhism, ancestor worship of Confucianism. The doctrine of original sin, the Trinity and the divinity of Jesus resulted in an anthropomorphic conception of God and the atonement by the death on the cross of Christianity and the exclusive chosen people idea of Judiasm.

II. MARMADUKE PICKTHALL'S COMMENT

Marmaduke Pickthall, who translated the meaning of the Holy Qurân and whose work has proved to represent one of the best translations available (in 693 medium size pages) says:

[There is no blessing bestowed on man better than opening his breast to Islam. It is Islam that guides man to the proper path and creates in him the intuition to properly distinguishing between good and evil and between happiness and misery. I prostrate myself before the Almighty God in complete submission and gratitude for the benediction which fills my heart with bliss and provides me with a good opportunity to live as a Muslim under the shadow of Islamic brotherhood!

III. SO SAYS THE HOLY QURAN

When comes the help of Allah and victory; and you see the people enter Allah's religion in crowds. Celebrate the praises of your Master and pray for His forgiveness for His oftreturning in grace and mercy.

- Al Nasr (1 - 3) -

III. MUSLIMS' CONTRIBUTION TO THE ADVANCEMENT OF THE WORLD

History and thousands of Al-Makhtutat (old handwritten books) tell us that Muslims contributed to the advancement of the world and establishment of numerous branches of science.

Early in the seventh century A.C. a new spring of thought flooded the Arabian Peninsula and rapidly swelled into a large river flooding and flourishing with life. This was the universal religion Islam.

It initiated in every field of the human life a spirit which had never been known in the history of mankind. The two extensive empires of that time (Persian and Buzantian) tried to stem its rising flood, but in the struggle they soon were swept away, and the Muslims could build an extended state greatr than the Roman Empire at its Zenith. Its industries, trade and culture became wide-spread. Until now, many of the words used in Europe for example bear Arabic origin. Needless to say that Muslims set ideals of civic-life, family life, hygiene, agriculture, architecture, irrigation, music, dress, food, calligraphy and games for every country they came into contact with it.

After Herodotus, Muslims were the oustanding historians of the world. Some of them (like Ibn Battuta for example) undertook long journeys to collect suitable material.

During the Abbasid period paper manufacture became an indigenous industry. Books were thus written and sold on a large-scale by book agencies and libraries.

Moreover, Muslims exprienced various jobs. They dived deep into the ocean to bring out pearls, and penetrated low into the earth's crust to dig out ores of iron, silver, gold, lead, mercury and the like. ... They also digged various networks of canals and supplied the west with spices, scents, ginger, sugar ...

In the Muslim world, education centers soon became wide spread. There was no village without a mosque, elementary or secondary school for teaching. They were supported by the endowments granted to them.

As mentioned before in books $1\cdot 4$, it was mainly the result of the teachings of the Holy Quran that urged Muslims to iniciate the principles of various branches of science. Even measured songs, or mensural music became well-known to Muslims for centuries before Europe became familiar to it.

Finally, for sure, true Islam is a grand gift granted by Allah to those whom He wishes:

When comes the help of Allah and victory, and you do see the people enter Allah's religion in crowds. Celebrate the praises of your Master and pray for His forgiveness for He is oft-returning in grace and mercy.

— Al-Near (1 - 3) —

6. HUMANITY REQUESTS ISLAM I. DYNAMISM OF ISLAM

Islam, being encompassed in some characteristic acts, good behaviour, prescribed formulas and prayers at stated times, was always able to cope with heterogenous elements. It is an all-pervading faith that permeates all phases of the true Muslim's life and envolves his whole being.

Throughout the creative centuries of Medieval Islam, the discussion of the main problems of the philosophy of religions almost always occupied the Muslim's mind. This debate was a sign of the dynamic power of Islam. Now, in the Age of Science, it is in progress. Muslim thought, moral values, social theories and science progress are again being emphasized.

However, there is now an apparent struggle between two main educated groups: The representatives of antidynamism and the proponents of dynamism. Whalever may be the case, the five pillars on which Islam is built are never touched. These are:

- Witnessing that there is no God save Allah, and that Muhammad is Allah's Messenger.
 - 2. Performing the daily prayers.
 - Paying the poor-due (Zakat).
 - 4. Keeping Ramadan (Fasting).
 - 5. Performing the Pillgrimage if possible (Al-Haj).

In any case, the common man is usually unable to express his fears or hopes, but surely he enjoys hearing about the amazing relation between science and Islam.

Muslim society is still well integrated: Traditional standards are upheld. Family ties remain strong and trust, mutual help and feeling of responsibility for one's extended

family are still unweakened. So, the family actually provides support in every need. The modern ways are suspect as a threat to that strongly knit social unit, and opposition to intrusion is great.

Nowadays, in most of the Islamic countries however, there is no discrimination between men and women with regard to employment and wages. Educated women had been already appointed in various posts. The number of lady-doctors, journalists, writers, lawyers, university professors, mechanical and agricultural engineers ... and teachers are beyond account.

II. EDUCATION

In many Muslim countries the internal enemies are still ignorance, poverty and sickness. These are interlocked in a vicious circle. Undoubtedly, Islam is not to be blamed for such conditions. Education has always ranked high in Islamic society during the Middle Ages, Nowadays, Muslims point out with justifiable pride to the decisive role played by their scholars during the Middle Ages in the development of modern civilization.

The Muslim scholars, built up on the teachings and fundamentals laid by the Holy Quran, achieved basic creative contributions of their own in various branches of science. notably mathematics, astronomy, meteorology; physics and medicine. (Refer to book (1) and book (3). In particular, however, mathematics and astronommy were stimulated by religious needs

At present the educated Muslim still lives intellectually in one and the same world which is dominated by religion and science together. This is because science is the message of Islam as described in this series of books. In fact, most educated Muslims continue to adhere to the traditional forms. beliefs, rites and ceremonies prescribed by Islam.

The oustanding feature is that the faith of most educated Muslims is indeed as strong as ever. Islam has never been hostile to the spread of knowledge into wide circles. It has always regarded learning, at least a useful tool to being a good Muslim acting according to its principles and ethics:

And say: O my Master. I beg for increasing my knowledge.

The study of the Holy Quran and the traditions is generally an act of religious piety and intellectual search for guidance in one's personal conduct.

As described in book (4), one of the most outstanding topics of Islam is the introduction of unique regulations concerning the distribution of property left by a Muslim after his death. The Muslim woman feels her position in that respect to be superior to that of woman of some other religions or nations.

III. WAR IN ISLAM

Practically, war in Islam can be regarded as an extension to the previous articles concerning argumentation in the Holy, Quran, and also Universality of Islam in book (4).

Principally, Islam is a cosmopolitan invocation which aims at the benefit and happiness of the human race and the spread of knowledge and equality among mankind. It is neither a racial nor a regional invocation which aims at setting up the sovereignity of any race, or the authority of any region, over others. The Holy Qurán says, for example what means:

 And We have not sent you (O Muhammad) save as a bringer of good tidings and a warner to all mankind, but most of the peoples know not.

. ١- وَمَا أَرْسَلْنَكَ إِلَّا كَافَةً لِلنَّاسِ بَشِيرًا وَيَذِيرٌ وَلَكِنَّ أَكْثَرُ الشَّاسِ لاَ تَعْلَمُونَ ."

سيأ (۲۸)

Blessed is He Who has revealed to His servant the Criterion that he may be a warner to all the peoples.

- Al-Furqan (1) -

- Sabaa (28) -

الفرقان (١)

It was only natural, therefore, that :

(1) Allah ordered Muhammad to stick to wisdom, fair exhortation and argue with the people nicely.

(2) Every true Muslim is responsible for informing non-Muslims, within his circle of ability, about true Islam and to be a good example of true Muslims in every respect.

 Call to the way of your Master with wisdom and fair exhortation and argue with them in the better way. Lo IYour Master is best aware of him who strays from His way, and He is best aware of those who go aright.

- Al-Nahl (125) -

و .. أَذْعُ إِلَىٰ سَبِيلِ رَبِكَ بِالْحِصَةِ وَالْقَرْعِظَةُ الْحَسَنَةُ وَجَدِهُمُ بِالْغِي هِيَ أَحْسَنُ إِذَ وَبَكَ هُوَأَعْمُ كِمَن ضَلَّ عَن سَبِيلِهِ وَهُوَاعْمُ بِالْهُنَدِينَ .."

النحل (١٢٥)

There is no compulsion in religion; the right path is henceforth distinct from the wrong one; and he who rejects false duties and believes in Allah has grasped a firm handhold which will never break; and Allah hears most and knows most.

— Al-Baqara (256) —

لَا إحْصُراه في الدِّينِ قد تَبَيّنَ الرّشْدُ مِن الغَيّ أَمْن يَكَفْر إلْظِينُوتِ وَيُؤْمِن إللّهِ فَقدِ السّتْمَسَكَ بِالعُرْوَةِ الْوُثْقَ لَا انفِصَامَ لَمَنَّ وَالنّوْمَةِ عَلَيْم اللّهِ النّفِصَامَ لَمَنَّ وَالنّوْمَة عَلِيمٌ ."

البقرة (٢٥٦)

3. And if your Master willed then all who are in the earth would have believed together; Lo! Would you (Muhammad) compel the people until they become believers?

- Yunus (99) -

وَلُوْشَاةَ رَبُّكَ لَآمَنَ مَن فِ الأَرْضِ كُلُهُم جَمِيعًا أَفَانَتَ تُكُوهُ النَّاسَ
 خَتَّى بَكُونُوا مُؤْمِنِينَ "

يونس (٩٩)

Clearly, therefore, Islam is mainly a religion of justice, peace and guidance. Undoubtedly, if the foes of Islam had allowed the new faith freedom of action and argumentation and had not murdered, or tortured, individual Muslims, then the latter would have not held any weapon against them.

However, Allah allowed Muslims to fight their foes just to put an end to their aggression and tyranny:

Those who have been driven from their homes unjustly only because they said our Master is Allah; for had it not been for Allah's repelling some men by means of others, cloisters and churches and oratories and mosques, wherein the name of Allah is oft-mentioned, would assuredly have been pulled down; verilly Allah supports one who supports Him. Lo! Surely Allah is strong and Almighty.

— Аl-Нај (40) —

. َ الَّذِينَ أَنْبِجُواْ مِن دِيَنرِهِم بِغَيْرِ حَقِّ إِلَّا أَن يَقُولُواْ رَبُنَا اللَّهُ وَلَوْلاَ دَفْمُ اللهِ النَّاسَ بَعْضُهُم بِبَغْضِ لَمُلِيَّتْ صَوْمِحُ ۚ وَبِيَّحٌ وَصَلَوْتٌ وَمَسْجِدُ

Muslims had to wait long before Allah allowed those who were oppressed under the yoke of their foe to take up their arms:

 Sanction is given to those who fight because they have been wronged and indeed Allah is able to give them victory.
 — Al-Haj (39) —

الحج (۲۹)

And fight in the way of Allah against those who fight against you, but begin not hostilities. Lo! Allah loves not the aggressors.

— Al-Baqara (190) —

البقرة (١٩٠)

IV. TODAY'S WORLD

NEEDS ISLAM

According to Islam, man is honoured without any discrimination whatever. He was honoured from the beginning of creation, since Allah made him His vicegerent on earth, and ordered His Angels to kneel for him. He indicated that He has endowed man with the ability to acquire knowledge in order to be able to master all that exists on earth, and harness it to his will by means of his intellect. In this respect, the Holy Qurân says for example what means:

"And behold; your Master said to the angels: "I will create a vice-gerent on earth." They said: "Will You place therein theings) who make mischief therein and shed blood? Whilst we do celebrate Your praises and glorify Your Holy (name)?" He said: "Surely I know what you know not." And He taught Adam the nature (or secrets) of all things, then He exhibited them before the angels and said:

"Tell me the names of these if you are right." They said:
"Glory to You: regarding knowledge we are aware of nothing
save what You have taught us. For sure, it is You who are
absolute in knowledge and wislom." He said: "O Adam¹ tell
them their names." When he had told them their names.
Allah said: "Did I not tell you that I know the secrets of the
heavens and the earth, and I know what you reveal, and what
you had been concealing?" And behold, "We said to the
angels:

Bow down to Adam; and they bowed down, not so Iblis. He refused and was naughty. He was of those who reject faith." وَّ إِذْ قَالَ رَبُكَ لِلْمُلْكَهِكُمْ إِلَى جَاعِلُ فِي الأَرْضِ خَلِيفَةٌ قَالُواْ أَتَعُمُلُ فِهَا مَن يُفْسِدُ فِهِهَا وَيَسْفِكُ الدِّمَةِ وَتَحْنُ نُسَبِحْ وَمَدِكُ وَنُقَدِّسُ لِكُّ قَالَ إِنِي أَتَكُمُ عَالاَ تَعْمُلُونَ ﴿ وَعَلَمْ ادْمَ الاَشْمَةَ كُفُهَا مُمْ عَرَضَهُمْ عَلَى المُسْتَهِكَةِ فَقَالَ أَنْجُمُونِي بِأَسْمَةِ هَمَوْلَاتِهِ إِن كُنتُمْ صَندِفِينَ ﴿ قَالُوا سُبْحَنكُ لَاعِلْمُ الْمَثْمَ إِنَّى إِلَّا مَا عَلَيْتَكُمَ إِلَيْنَ إِلَى اللّهِ اللّهِ اللّهِ اللّهِ اللّه عَبْدَ السَّمَ اللّهِ اللّهِ إِلَيْنَ اللّهِ مَا عَلَيْتُ اللّهِ اللّهُ اللّهِ اللّهِ وَاللّهُ اللّهِ اللّهِ اللّهِ اللّهِ وَاللّهُ اللّهُ اللّهُ اللّهُ اللّهُ اللّهُ اللّهُ اللّهُ اللّهِ اللّهِ اللّهِ اللّهُ الللّهُ اللّهُ الللّهُ اللّهُ اللّهُ اللللّهُ الللّهُ اللللّهُ الللللّهُ الللّهُ الللّهُ اللّهُ اللّهُ اللّه

البقرة (۳۰ - ۳۴)

These verses reveal three principal facts:

First: Man is the vicegerent of Allah on earth and consequently the solar system. Allah gave him authority over it by virtue of his humanity and intellect.

Second: Allah enabled man to prossess the earth because of his ability by nature to know things and to uncover the secrets or the laws, of the universe. He says what means:

And We have placed you with authority on earth and provided you therein with means for the fulfilment of your life: Few are the thanks that you give.

- Al-Aaraf (10) -

Third: Man may surpass the angels by his deeds. If people do not degenerate in their earthly life to the standard of the animals they would be better than angels. One reads in the Holy Qurân what means:

And We have honoured the sons of Adam and provided them with transport on land and sea and given them for sustenance things good and pure and conferred on them special favours above a great number of our creation.

— Al-Israa (70) —

الإسراء (۷۰)

Oviously, the dignity which Islam emphasizes is granted to man only because he is a human being possessing the qualities of humanity, irrespective of any other qualities such as colour, nationality, race ...

7. THE ETERNAL MIRACLE

As was mentioned in book (1), nothing can remain on earth forever as an eternal miracle except a unique book. The inimitable elocation and teachings of such a book must be conspicuous and convincing at all stages and types of human civilization.

Any other sort of miracles, notably those which disobey the laws of nature, such as calling the dead to rise up for a while, cannot be eternal, and are limited in all respects to their particular place and time.

In the present age (Age of Science) the above statement has been justified in the light of the recent interpretation of a great number of verses in the Holy Qurân which revealed scientific facts in various fields. Detailed comments are given below concerning some of these verses.

II. THE EARTH'S FRESH WATER

Rain is the direct and indirect source of fresh water on earth, whether we take it from rivers, tributaries, wells, fountains ... Subsoil fresh water also has its origin as rain.

Rain falls from clouds which are known in science (meteorology) as nimbus clouds. Two different types of nimbus clouds exist. These are:

 a) Nimbostratus clouds, which form and grow or, spread, in single layers or strata. This is why they are called stratus.

b) Cumulonimbus clouds, which develop and grow vertically to reach levels as high as 10 · 20 kilometers, and thus appear like mountains. These are the only type of clouds in which hail forms, and lightning, thunderstorms and thunderbolts occur. Amazingly enough, the Holy Qurân says for example what means:

1. And have you seen the water which you drink? Have you made it fall from the nimbus (clouds), or is it We Who send it down?

- Al-Waqiat (68 - 69) -

الواقعة (٨٨ - ٢٩)

2. Have you not seen that Allah sends down rain from the sky and leads it through springs in the earth? Then He causes to grow therewith plantation of various colours; then it withers you will see it grow yellow; then He makes it dry and crumble away. Truly this is a message of remembrance to men of understanding.

— Al-Zumar (21) —

With respect to nimbostratus clouds one reads:

3. Allah is He Who sends forth the winds so they raise clouds, then does He spread them (in strata) in the sky as He pleases and He makes them partially thick so that you see the rain coming from inside them; then when He causes it to fall upon whom He pleases of His worshippers they rejoice.

- Al-Room (48) -

٣- أَنَّهُ الذِي يُرْسِلُ الْرِيَحَ فَتَشِيرِ تَحَايَا فَيَدُسُطُهُ فِي السَّمَا وَكُوفَ يَشَا اَ وَيَجْمَلُهُ كِسَفًا فَتَرَى الْوَدَقَ يَخْرُجُ مِنْ خِلْلِهِ ۖ فَإِذَا ۚ أَصَابَ ۚ يِهِ مِن يَشَاءُ مِنْ عِادِوة إِذَا هُمْ يَشَتَلِمُونَ ؟'

الزوم (٤٨)

Concerning the cumulonimbus clouds, one reads :

4. Have you not seen that Allah drives along bits of clouds, then joins them together, then makes them into heaps of cumulus then you will see rain issuing from their inside and He sends down from the sky mountain masses of cumulus wherein is hall afflicting therewith whom He pleases and turning it away from whom He pleases; the vivid flash of its lightning (whose electric charge is due to hail) almost takes away the sight.

- AFNour (43) - 2 - أَلَمْ تَرَانَا لَقَدَّ يُرْجِى حَابَا ثُمْ يُؤَلِّفُ بَيْنَارُ ثُمْ يَبْعَلُهُ رَكَامًا فَتَرَى الْوَدَقَ يُحْرَجُ مِنْ طِلْنُلُهِ وَيُمْرِفُهُو مِنَ السَّمَاءُ مِن جِبَالٍ فِيها مِن بَرَدٍ فَيُصِيبُ بِهِ -مَن يَشَاءُ وَيَصْرِفُهُو عَن مَن يَشَاءً مَنكَادُ سَنَا بَرْقِهِ ، يَذْهَبُ بِالْأَبْصَدِرٍ." النور (٣٤)

The stages of the formation of the cumulonimbus cloud have been photographed, and it has been made clear that generally it passes by the following stages: First: Small cells of cumulus appear in the sky.

Second: Two or more cells unite together to form the growing cumulus.

Third: The cloud so formed continues to grow rapidly to the cumulonimbus stage and thus appears like a huge mountain from which rain and hail issue.

Fourth: Hail plays the role in charging the cloud with electricity. (Refer to book (1), P. 19). An observer located near the cloud by some means or another, loses his sight for a while on looking at the lightning flashes.

III. THE FRESH WATER CYCLE

It is now accepted that the earth's fresh water goes through a cycle between the earth's water surfaces and the atmosphere. Water is perpetually evaporating from water surfaces such as oceans and seas by virtue of solar radiation and air currents and is carried upwards in the atmosphere to form clouds and nimbus clouds.

In order that rain might fall from the nimbus clouds, winds must continue to supply (or seed or even fertilize) the clouds with : (1) water — vapour necessary for condensation and (2) nuclei of condensation which have affinity to water, or absorb it. On these nuclei rain drops or ice crystals develop according to the prevailing temperature.

In ancient times it was believed that the fresh water was stored somewhere high in the sky. The Holy Quran rejected this belief and said what means:

And We send the winds seeding (the clouds) thus cause water to descend from the sky, therewith providing you with it to drink and you are not storing it (in the sky).

— Al-Hijr (22) —

IV. ON THE ORIGIN OF THE UNIVERSE

A limited number of theories concerning the origin of the universe has been available in the Age of Science. Since a long time ago, astronomers used to believe all the stars to be clustered together in a single "isle and universe", or galaxy — the Milky Way — embadded in empty infinity of space.

Gradually, with the advance of the tools of observation and in the light of the Theory of Relativity, astronomers became aware of the fact that our universe is a universe of galaxies similar to our own and unlimited in number. They are receding from us and the universe is expanding. Miraculously, this is also justified by the Holy Qurân which says what means:

With power and skill did We construct the heavens (universe) and indeed We are expanding them.

الذاريات (٢٤)

By the aid of spectrum analysis (the so-called red-shift or Doppler effect) it was revealed that billions of years had to pass since galaxies external to our own were condensed together in an extremely limited space of unimaginable density.

Now, the Holy Quran, being an iternal miracle, predicted these results since about 1500 years ago! It says for example what means:

. 1. Are, then, they who are bent on denying the truth aware that the heavens and the earth were (originally) one sin-

gle entity which We then parted asunder and We made of water every living thing, do not they thus believe?!

- Al-Anbiyaa (30) -

الأنبياء (٣٠)

Evidently, this verse indicates that: (1) The material of the universe was originally a single entity whose parts must have been close together. (2) The separation took place systematically, and galaxies were grouped in clusters to orbit about their common centers of mass. The process is reversible:

 On that Day We shall roll up the heavens like the rolling up of the scrolls. As We originated the first creation We shall bring it forth again; a promise incumbent on Us so shall We do

— Al-Anbiyaa (104) —

الأنبياء (١٠٤)

This verse indicates clearly that:

a) All the galaxies, inspite of the fact that they are receding since the beginning of creation, yet they will be brought

by Allah in contact again within limited space as they happened to be at the beginning of creation.

- The above statements are made sure by the Holy Qurân, being promise incumbent on Allah, However, a great number of astronomers say that the expanding universe should ultimately collapse by gravity into a limited space.
- 3. ... And the earth shall all be His handful on the Day of resurrection and the heavens shall be folded in His right hand (so belittled) ...

- Al-Zumar (67) -

The verse predicts that the entire universe (earth and heavens) will ultimately be one unit under Allah's vivid power on the Last Day.

Then He took hold of the heaven when it was gas and said to it and to the earth come willingly or unwillingly. they both said : We come willingly.

- Fussilat (11) -

فصلت (۱۱)

This verse indicates clearly that everything in the universe obeys Allah's physical laws, which are fixed with changing space and time. This fact enabled man to acquire knowledge and deduce theories by careful observation and examination of the various things in the universe. The outstanding available theory is known as "the Big-bang" theory. It provides us with a reasonable answer to the question concerning the origin of the universe.

It has not been familiar in the present series of books (Islam and Science) to refer to mere theories which are man made. However, regarding the creation of the universe in particular, Allah says what means:

1. I did not call them to witness the creation of the heavens and the earth ...

- Al-Kahf (51) -

For sure the creation of the heavens and the earth is larger than the creation of man but most people know not.

— Ghafir (57) —

However, Allah supports us with suitable and proper knowledge. He says what means:

... And they (men) are not aware of anything of His knowledge except what He pleases (to offer) ...

— Al Bagara (255) —

V. THE BIG-BANG THEORY

The big-bang is a theory of cosmology in which the expansion of the universe is presumed to have begun in primeval explosion. In this theory the following principles are to be regarded unquestionable:

1) Observations:

Our observations supply us with information applicable to the universe as a whole. In other words, the part of the universe that we actually observe represents the entire cosmos. Allah says what means:

.... And indeed you will neither find any alteration in Allah's order (and laws) nor will you find any deformation in Allah's order (and laws).

فاطر (٤٣)

2) The expanding universe:

If no new matter is being added to the expanding universe, then the total mass of the entire universe remains constant. This simply means that all the matter in the universe must have once been close together. Once more, amazingly enough, one reads in the Holy Quran what means :

a) With power and skill did We construct the heavens (the universe) and indeed We are expanding them.

- A-Zariyat (47) -

b) Do not the infidels see that the heavens and the earth were joined together as one unit before We split them apart ...
 — Al-Anbivaa (30) —

Evidently, this means that once (before time) some original big explosion started-galaxies moving away from each other, and the red-shift law began to apply.

3) The universe must have a finite age:

Disregarding gravity, galaxies moving in space should have their speeds not changed since the explosion took place. A galaxy at a distancer S units moving at a speed V units must have been receding from us for the time.

$$t = \frac{S}{V} =$$

= 10 to 20 billion years.

This represents the limits of the age of the universe.

4) About the geometry of space:

According to the general theory of Relativity, the genetry of space is affected by the presence of matter in it, and travelling in space is thus accomplished in curved lines. The Holy Qurân refers to this effect by the word (yaaruj), as mentioned in book (3) P. (37 - 38). The word means to move in curved lines:

He (Allah) knows all that goes into the earth and all that comes out thereof, all that comes down from the heaven and all that yaaruj (mounts) thereto and He is Al-Rahim Al-Ghafoor.

— Sabaa (2) —

5) The velocities of escape of galaxies from each other depend on the mean density of matter in the universe. This has been estimated to be between 10²⁹ to 10³¹ gram per cm³.

Galaxies would eventually fall back together as soon as they start moving slower than some critical velocity of escape. This is made sure by the Holy Qurân which says for example what means:

On that day (the hereafter) We shall roll up the heavens, like the rolling up of the scrolls. As We originated the first creation We shall bring it forth again; a promise incumbent on Us so shall We do.

— Al-Anbiyaa (104) —

In conclusion, observational and theoretical evidences show that the universe is expanding as a result of its evolution form a big-bang billions of years ago. After the stage of expansion, the entire universe will collapse and skrink by gravity into limited space as it happened to be at the beginning of creation. These conclusions also find support in some cosmic verses in the Holv Qurân in an amazing manner!

8. SOME EVENTS

FORETOLD BY THE HOLY QURAN

I. PAST EVENTS

Some verses in the Holy Quran have revealed certain events:

Who (Allah) is aware of the futurity (and unseen); and from Him is not hidden the least mass of an atom neither in the heavens nor in the earth, nor is there anything less than that or greater but in a conspicuous record.

— Sabaa (3) —

Some events have already been realized exactly as they had been postulated by the Holy Quran. These are past events. Others still remain to take place. The following is an example of the past events.

Early Muslims were generally sympathitic with the Romans because they professed a heavenly religion and had a heavenly book (the Bible). The case was not so with the Persians.

In the first year of Al-Hijra since Muhammad, prayers and peace be upon him, left Macca to Al-Madina) Muslims became distressed when the Romans were defeated by the Persians at the battle of (Zikar) as well as at other battles. The polytheists of the Arabian Peninsula celebrated those victories and gloated over the Muslim's disappointment.

The polytheists said to the Muslim: "Remember you Muslims that the Roman's defeat is evident proof that our religion, of worshipping several gods, is the true religion and that we are going to win the victory over you."

On recording these feelings, the Holy Quran not only promised victory for the Romans over the Persians but also promised victory for the Muslims over all of them. History proved that this promise was fully fulfilled. Allah says what means:

The Romans have been defeated in a land close by, but they even after this defeat of theirs they will soon be victorious within a few years; with Allah is the decision in the past and in the future, and on that day shall the believers rejoice with victory from Allah. He leads to victory whom He pleases and He is the Almighty the Merciful; Allah's promise, Allah never breaks down His promise but most people know not.

- A-Room (2 · 6) -

II PRESENT EVENTS

Within the last and present centuries, the modes of communication, transportation ... improved totally in rapidly ascending steps. Various vehicles now carry people in and over water, on land, in air and through space. Allah is He Who offers man the knowledge and ability required in order to manufacture everything he needs in various fields.

With respect to the modes of communications and travelling, for example, the Holy Qurân says what means:

 And the horses and mules and donkeys to ride and to deck in beauty and He creates what you know not.

- Al-Nahl (8) --

النحل (٨)

And if We open upon them a door of the sky that they may go on ascending (curvilinearly), therein they will say: Checked are our sights, or even we are people enervated by magic.

- Al-Hijr (14 - 15) -

الحجر (١٤ - ١٥)

At present, in the Age of Space, man became aware of the fact that space travel comprises unusual serious difficulties capable of initiating the feeling of the interference of some sort of magic power leading, for example to:

- Disappearance of gravity.
- Absolutely dim environment (space).
 - 3. No dalylight.
 - Abnormal number of stars.
- Unbearable vehicle vibrations.

The Holy Qurân also described parts of the earth's surface which were unknown to the Arabs during the time of revelation such as the polar cap. "Refer to Book (1) P. (12).

III. FUTURE EVENTS

Muslims do believe in the Last Day or day of Resurrection or the so-called the Hour. Its approach is preceded by certain signs. The Holy Qurân uncovers one of them and says what means:

(When the Hour approaches the moon splits).

- Al-Qamar (1) -

القمر (١)

Further details are given in book (6).

IV. THE QURAN

THE UNIQUE SOURCE OF HAPPINESS

The most sincere words describing the Holy Quran were those of the Prophet Muhammad when he said what means:

Allah revealed the Qurân as order as well as a restriant, a running tradition and prevailing example. In it you find a prohetic account about yourselves, your predecessors and your successors. The Books is, in itself, of everlasting novelty and countless marvels; a book of justice and of void of jest. Who speaks its word is truthful, who judges by its laws is just, who vows by it eradicates all dcubts, who follows its teachings will be recompensed, who adheres to its guidance leads himself to the right way, who seeks another guide is astray and who rules but by its laws will be stopped short by Allah. It is the true word of wisdom, resplendent light, the right way, a shelter to which those who resort are preserved by the Almighty. It is the salvation for its followers with no deviations to be nut right and no faults to be remedied.

THE QURAN'S MARVELS ARE EVERLASTINGLY
BEAUTIFUL AND ETERNALLY NEW

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